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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,586	12/18/2000	Noboru Yamazaki	9333/253	3534

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EXAMINER

BROADHEAD, BRIAN J

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/739,586

Applicant(s)

YAMAZAKI, NOBORU

Examiner

Brian J. Broadhead

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claims 9 and 15 are objected to because of the following informalities: The claims improperly repeat "lane change guidance between a partial lane and another lane is". Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al., 5862509, in view of Inoue et al., 6295503.
3. Desai et al. disclose a map storage section for storing map data including road information regarding a partial lane in a plurality of lanes constituting a road, where advancing or leaving between a partial lane relative to another lane is permitted only in a predetermined authorized section(263); a vehicle position detecting section(253); an navigation processing section for performing a predetermined navigation operating(261); a timing judging section for judging a timing for performing a predetermined route guidance notification regarding the authorized section and a guidance notification section for performing the guidance notification on lines 42-52, on column 5. Desai et al. do not disclose said road information regarding a partial lane comprising node and link data wherein a predetermined authorized section for advancing or leaving is stored as a node and a section of the partial lane extending between two authorized sections is stored as a link; and each lane can be its own link.

Inoue et al., teach said road information regarding a partial lane comprising node and link data wherein a predetermined authorized section for advancing or leaving is stored as a node and a section of the partial lane extending between two authorized sections is stored as a link on lines 45-50, on column 6; and each lane can be its own link on lines 46-50, on column 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the separate links for each lane of Inoue et al. in the invention of Desai et al. because such modification ensures the destination route is set more adequately by including the particular lane as stated on lines 53-55, on column 2.

4. Claims 1-13, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al., 5862509, in view of Inoue et al., 6295503, in further view of Kishi et al., 5410486.

5. As per claims 1, 2, 9, 12, and 15, Desai et al. disclose a map storage section for storing map data including road information regarding a partial lane in a plurality of lanes constituting a road, where advancing or leaving between a partial lane relative to another lane is permitted only in a predetermined authorized section(263); a vehicle position detecting section(253); an navigation processing section for performing a predetermined navigation operating(261); a timing judging section for judging a timing for performing a predetermined route guidance notification regarding the authorized section and a guidance notification section for performing the guidance notification on lines 42-52, on column 5. Desai et al. do not disclose said road information regarding a partial lane comprising node and link data wherein a predetermined authorized section for advancing or leaving is stored as a node and a section of the partial lane extending

between two authorized sections is stored as a link, each lane can be its own link; the route search processing section sets the guidance route such that as the number of lanes increases, guidance regarding the carpool lane is performed earlier and wherein lane change guidance between a partial lane and another lane is performed at a timing that takes into consideration the location of a desired road exit and one of the width of the road and the number of lanes in the road.

6. Inoue et al. teach said road information regarding a partial lane comprising node and link data wherein a predetermined authorized section for advancing or leaving is stored as a node and a section of the partial lane extending between two authorized sections is stored as a link on lines 45-50, on column 6; and each lane can be its own link on lines 46-50, on column 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the separate links for each lane of Inoue et al. in the invention of Desai et al. because such modification ensures the destination route is set more adequately by including the particular lane as stated on lines 53-55, on column 2.

7. Desai et al. and Inoue et al. do not disclose the route search processing section sets the guidance route such that as the number of lanes increases, guidance regarding the carpool lane is performed earlier and wherein lane change guidance between a partial lane and another lane is performed at a timing that takes into consideration the location of a desired road exit and one of the width of the road and the number of lanes in the road.

8. Kishi et al. teach of the route search processing section sets the guidance route such that as the number of lanes increases, guidance regarding the lane is performed earlier, and guidance regarding the carpool lane is performed earlier and wherein lane change guidance between a partial lane and another lane is performed at a timing that takes into consideration the location of a desired road exit and one of the width of the road and the number of lanes in the road on lines 45-65, on column 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the earlier guidance of Kishi et al. in the invention of Desai et al. and Inoue et al. because such modification would allow the driver to execute a lane change with sufficient margin before reaching the guidance point as stated on lines 19-21, on column 3, of Kishi et al.

9. As per claim 3, Desai et al. disclose a driving lane instruction section for setting whether or not the vehicle is to travel the partial lane on lines 55-65, on column 3; wherein the navigation processing section further comprises a route search processing section taking into account the availability of the partial lane, depending on the setting of the driving lane instruction section on lines 30-33, on column 2.

10. As per claim 4, Desai et al. disclose the navigation processing section further comprises a borderline display section for displaying a borderline between the partial lane and the other lane in the authorized section in a color different from that of other borderlines on lines 44-55, on column 8.

11. As per claims 5, 7, 16, and 20, Desai et al. disclose the guidance notification section performs guidance notification both by display and spoken announcement on line 45, on column 8.

12. As per claims 6 and 19, Desai et al. disclose the guidance notification section performs the guidance notification by an enlarged view on lines 65-67, on column 8.

13. As per claims 8, 10, and 18, Desai et al. disclose the partial lane is a carpool lane on line 39, on column 1.

14. As per claim 11, Desai et al. disclose the route search processing section searches the driving route by setting the cost of a link corresponding to the carpool lane lower than a link of a corresponding to an ordinary road on lines 25-28, on column 3.

15. As per claims 13 and 17, Desai et al. disclose the route search processing section comprises a driving lane instruction section for setting whether or not the driving route is searched taking the use of partial lane into consideration on lines 55-67, on column 3.

Response to Arguments

16. Applicant's arguments filed 9-26-03 have been fully considered but they are not persuasive. The argument with respect to claim 14 is not convincing because it is being argued that the current invention discloses giving guidance both during route guidance and not during route guidance. However, the Desai et al. reference discloses a map display that show the present location of apparatus by graphical map of the area on lines 15-16, on column 12, so that even if there is no guidance route, the display still shows the current position of the apparatus on the map display. This map display shows the

roads around the apparatus and would include any entrance and exits to the road system. As per the second argument, it is not convincing because the branching point in Kishi is the lane change between a partial lane and another lane. A branching point is a node and the nodes are disclosed as representing restricted lane changes in the reference of Inoue et al.

Conclusion

- 17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 703-308-9033. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

BJB
December 22, 2003



WILLIAM A. CUCHLINSKI, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600